From: Richard Rupert/R3/USEPA/US

Sent: 3/28/2012 7:32:10 AM

To: "Dennis J Low" <djlow@usgs.gov>

CC:

Subject: Re: report

Good morning, I will be forwarding you a data set on all the available historical data from the Dimock area in a couple days. A new, more complete version will be arriving shortly. I will also be having our contractor beef up the earlier data set I sent you to include sulfate, Ferrous Fe, TDS and Cl- .

I am just now starting to look at your data. thanks again. Rich

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"The commander in the field is always right and the rear echelon is wrong, unless proved otherwise." Colin Powell

From: Dennis J Low <djlow@usgs.gov>
To: Richard Rupert/R3/USEPA/US

Date: 03/27/2012 09:30 AM

Subject: Re: report

[attachment "EPA_Summary.xls" deleted by Richard Rupert/R3/USEPA/US] [attachment "DIMOCK_USGS_QW.xls" deleted by Richard Rupert/R3/USEPA/US] [attachment "gw.sub.susquehanna.xls" deleted by Richard Rupert/R3/USEPA/US] [attachment "DimockQW_Results.xlsx" deleted by Richard Rupert/R3/USEPA/US]

Rich,

Here are the Excel files we talked about. The first one "DimockQW_Results" presents a percentile comparison between our Susquehanna County data "County" and your DIMOCK_new_methane and metals file. The latter includes filtered and non-filtered sample results plus replicates and these results are presented in the DimockQW_Results as "Dimock". Most of this data is from the report: Taylor, L.E., 1984, Groundwater resources of the Upper Susquehanna River Basin, Pennsylvania: Pennsylvania Geological Survey, 4th. ser., Water Resource Report 58, 136 p.

File "gw.sub.susquehanna" is from the USGS GWSI data base supplemented with the WRR 58 report. I am providing it to you as WRR 58 is no longer in print and is not in an electronic format. This file contains the well data the USGS has for Susquehanna County. Unfortunately, we don't have complete lat/longs for all wells, and as you will see, other information is missing also.

File "DIMOCK_USGS_QW" contains all the water-quality data the USGS has for Susquehanna County, and some of this

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data was supplemented from WRR 58. This file contains four sheets - Field (pH,specific conductance), Majorlons (i.e. calcium, TDS, SO4), Minorlons (i.e. As, Cr, Al), Nutrients (i.e. nitrtate).

File "EPA_Summary" contains four sheets. Sheet "Edited_Data" is the edited data I used to generate my percentiles. The other sheets I began to edit but ran out of time for comparisons. The goal was to separate out filtered samples from non-filtered samples. I saw enough variation between the two types of samples that I would not really want to combine the two, but I did in "Edited_Data" as I was running out of time.

I think it would be useful if the USEPA and USGS could collectively look at the water-quality data you have been gathering. Seeing how groundwater chemistry changes from pre-drilling to drilling, to post drilling and longer-term would be very useful and informative to both agencies and to the public. One important item, is to evaluate seasonal changes in analytes of interest, as there can be magnitude changes in arsenic concentrations in the same well over a period of seasons.

Please give me a call or email if you have any questions.

Good luck.

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